

Health Monitoring Standard Operating Procedures V1.01, 11/1/2022

## Health Monitoring Program and Outbreak Remediation

Animal health is of critical concern to every researcher seeking to obtain meaningful and reproducible experimental results. The goal of the MMRRC health monitoring program is to ensure that all mice distributed are free of infectious pathogens. From the moment of their arrival at an MMRRC facility, every mouse strain is rederived into barrier facilities, maintained with strict biosecurity SOPs and their pathogen status monitored using rigorous health monitoring programs with extensive exclusion lists that include all known pathogens of mice. To that end, the following approaches are utilized:

- I. Mouse lines reanimated from cryopreserved materials are tested prior to distribution by evaluating recipient females at the time pups are weaned for any excluded pathogens. Additional testing of rederived pups from each litter may be done upon request of the client.
- **II.** If a live colony is maintained, production colonies or sentinels of those colonies are tested at regular (no less that quarterly) intervals.
  - a. For all live colonies of mouse strains, the infection status of each production colony is evaluated for a standardize list of pathogens
  - b. Additional agents that represent pathobionts / opportunists may also be included in monitoring programs at the discretion of the center
  - c. Additional testing may be done, as needed, to meet importation requirements for receiving institutions
- **III.** Health monitoring program details (e.g., sentinel strain, testing modality) may vary among the centers. Details can be found at:
  - a. MMRRC at the University of California Davis
  - b. MMRRC at the University of Missouri
  - c. MMRRC at the University of North Carolina at Chapel Hill
  - d. MMRRC at The Jackson Laboratory
- **IV.** If positive results are obtained
  - a. Shipment of mice involved will be immediately suspended
  - b. The MMRRC center will confirm or refute the positive result
  - c. If the positive result is confirmed and/or a definitive diagnosis achieved
    - i. All clients who have received mice during the previous testing quarter will be notified immediately and a notice will be placed on the MMRRC website.
    - ii. The center in question will immediately initiate rederivation procedures so that mice can again become readily available
- V. For Centers that distribute cells or tissues, donors or colonies from which donors are obtained, will be similarly tested.